

Annexin A1/ANXA1 Protein, Mouse (His)

Cat. No.:	HY-P72078
Synonyms:	Anxa1; Anx1; Lpc-1; Lpc1Annexin A1; Annexin I; Annexin-1; Calpactin II; Calpactin-2; Chromobindin-9; Lipocortin I; Phospholipase A2 inhibitory protein; p35
Species:	Mouse
Source:	E. coli
Accession:	P10107 (A2-N346)
Gene ID:	16952
Molecular Weight:	Approximately 42.6 kDa

PROPERTIES

AA Sequence	<pre> AMVSEFLKQA RFLNQEQEY VQAVKSYKGG PGS AVSPYPS FNVSSDVAAL HKAIMVKGVD EATIIDLTK RTNAQRQQIK AAYLQENGKP LDEVLRKALT GHLEEVVLAM LKTPAQFDAD ELRGAMKGLG TDEDTLIEIL TTRSNEQIRE INRVYREELK RDLAKDITSD TSGDFRKALL ALAKGDRCQD LSVNQDLADT DARALYEAGE RRKGTDVNVF TTILTSRSFP HLRRVFQNYG KYSQHDMNKA LDLELKGDI E KCLTTIVKCA TSTPAFFAEK LYEAMKGAGT RHKALIRIMV SRSEIDMNEI KVFYQKKYGI SLCQAILDET KGDYEKILVA LCGGN </pre>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.2 µm sterile filtered PBS, 6% Trehalose, pH 7.4
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Annexin A1 (ANXA1) emerges as a multifaceted player in the innate immune response, acting as both an effector of glucocorticoid-mediated responses and a regulator of the inflammatory process. Exhibiting potent anti-inflammatory activity, ANXA1 contributes to the glucocorticoid-mediated down-regulation of the early phase of the inflammatory response. Beyond its role in the innate immune system, ANXA1 significantly impacts the adaptive immune response by
-------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

enhancing signaling cascades triggered by T-cell activation, thereby regulating the differentiation and proliferation of activated T-cells. It promotes T-cell differentiation into Th1 cells while negatively regulating differentiation into Th2 cells. Additionally, ANXA1 plays a pivotal role in hormone exocytosis regulation through the activation of formyl peptide receptors and reorganization of the actin cytoskeleton. With a high affinity for Ca(2+), ANXA1 can bind up to eight Ca(2+) ions and demonstrates Ca(2+)-dependent interactions with phospholipid membranes. Functionally, ANXA1 contributes to the formation of phagocytic cups and phagosomes, playing a crucial role in phagocytosis by mediating the Ca(2+)-dependent interaction between phagosomes and the actin cytoskeleton. Moreover, ANXA1 promotes chemotaxis of granulocytes and monocytes through activation of formyl peptide receptors, leading to the rearrangement of the actin cytoskeleton, cell polarization, and cell migration. Beyond its immune functions, ANXA1 plays a vital role in the resolution of inflammation and wound healing, acting through neutrophil N-formyl peptide receptors to enhance the release of CXCL2.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA